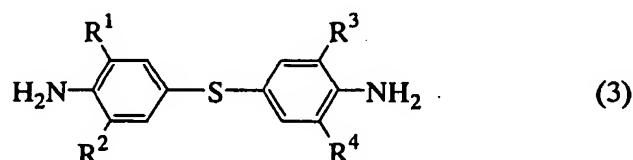
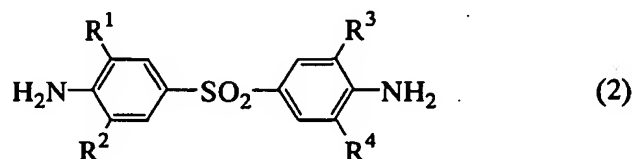
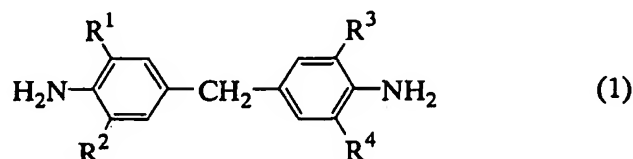


10/618,765

CLAIMS AS OF
9/16/05

CLAIMS:

1. A liquid epoxy resin composition comprising (A) a liquid epoxy resin, (B) an aromatic amine curing agent, and
5 (C) an inorganic filler, wherein
the aromatic amine curing agent (B) comprises at least 5% by weight based on the entire curing agent of at least one aromatic amine compound having a purity of at least 99% selected from compounds having the following general formulae
10 (1) to (3):



wherein each of R^1 to R^4 is hydrogen or a monovalent hydrocarbon group having 1 to 6 carbon atoms,

the liquid epoxy resin (A) and the aromatic amine curing agent (B) are present in a molar ratio (A)/(B) from
15 0.7/1 to 0.9/1, and

the composition has a toughness K_{1c} of at least 3.5.

2. The composition of claim 1 which is substantially free
20 of an alkoxy-bearing silane coupling agent except that an alkoxy-bearing silane coupling agent is used for the surface treatment of the inorganic filler.

3. The composition of claim 1, further comprising a silicone-modified resin in the form of a copolymer which is obtained from an alkenyl group-containing epoxy resin or phenolic resin and an organopolysiloxane having the average
5 compositional formula (4):



wherein R^s is a substituted or unsubstituted monovalent
10 hydrocarbon group, "a" is a number of 0.01 to 0.1, "b" is a number of 1.8 to 2.2, and $1.81 \leq a+b \leq 2.3$, said organopolysiloxane containing per molecule 20 to 400 silicon atoms and 1 to 5 hydrogen atoms each directly attached to a silicon atom (i.e., SiH groups), by effecting addition
15 reaction between alkenyl groups and SiH groups.

4. A semiconductor device which is encapsulated with the liquid epoxy resin composition of claim 1 in the cured state.

20 5. A flip chip type semiconductor device which is encapsulated with the liquid epoxy resin composition of claim 1 in the cured state as an underfill.